

Application No. 10/735,424
Amendment dated January 25, 2006
In response to Office Action dated: December 9, 2005

Remarks

Claims 10-37 have been cancelled and will be pursued in divisional applications. Claims 1-9 are presently pending.

Claims 1-7 and 9 are rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over either Sano et al. (6,676,738, "Sano") or Arita et al. (6,730,149, "Arita").

Claims 1-6 and 9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Thakkar et al. (6,203,605, "Thakkar").

Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Thakkar.

Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over either Sano or Arita.

Claims 1 and 2 have been amended.

35 U.S.C. § 102 (Novelty)

Applicants respectfully submit that claim 1 is novel over Sano, Arita, and Thakkar, because the composition of claim 1 contains graphite dispersed in water, which is different from the compositions of Sano, Arita, and Thakkar.

As the Office Action points out, Sano discloses a black ink composition containing a carbon black and a pigment; Arita discloses an ink composition containing carbon black; and Thakkar discloses an ink jet composition based on chemically modified carbon black dispersion. However, none of Sano, Arita, and Thakkar discloses an ink composition containing graphite, which is substantially different from carbon black. One skilled in the art understands that graphite is crystalline carbon that is slippery and often used as lubricant, while carbon black is made from amorphous carbon that has been divided into fine particles. Graphite and carbon black have very

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different properties in many aspects, including different conductivities, different binding abilities, different colors, etc.

Therefore, claim 1 is distinguished from Sano, Arita, and Thakkar because these references do not disclose a composition containing graphite dispersed in water. Claim 1 and claims 2-9 that depend from claim 1 are therefore novel.

35 U.S.C. § 103 (Non-obviousness)

The Office Action alternatively rejects claims 1-9 under 35 U.S.C. § 103(a) as obvious over Sano, Arita, or Thakkar.

Applicants respectfully submit that the change from the carbon black composition of Sano, Arita, or Thakkar to the graphite composition of the present application is not obvious, as there is no teaching or motivation in the prior art for a person of ordinary skill in the art to make this change. Each of the carbon black compositions of Sano, Arita, and Thakkar is an inkjet ink composition, which requires the carbon particles in the composition to possess certain desired properties. As discussed above, graphite is slippery crystalline carbon and is often used as a lubricant, while carbon black is amorphous carbon and is commonly used as a pigment in printer's inks. Both carbon black and graphite were well known before the invention of Sano, Arita, or Thakkar. However, all three patents do not mention graphite at all, and do not teach or suggest that graphite can be used to substitute the carbon black in their ink compositions. Therefore, there is no motivation or suggestion in the prior art for a person of ordinary skill in the art to substitute graphite for carbon black in the composition of Sano, Arita, or Thakkar. Neither is there a reasonable expectation of success in the prior art that the ink composition of Sano, Arita, or Thakkar will still work if graphite instead of carbon black is used.

Therefore, claims 1-9 are non-obvious in view of the prior art of record.

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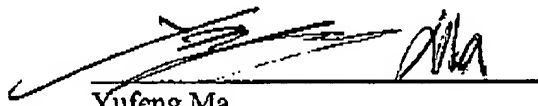
Conclusion

In view of the above amendments and remarks, Applicants respectfully request reconsideration and allowance of all the pending claims (1-9). A Notice of Allowance is respectfully solicited.

The Commissioner is authorized to charge any required fees or credit overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

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